The Council for Children & Families

Evidence-Based Home Visiting Program

Program Evaluation Report
2009-2010 Program Year

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Summary Key Findings from the 2009-2010 Council for Children & Families Evidence Based Home Visiting Program

The Council for Children & Families (CCF) has since July 2007 managed funds to support a portfolio of evidence-based home visiting (EBHV) services in Washington State. As of July 2010, this portfolio included 11 programs offered in six communities. Although constrained by the state's budget challenges, the Legislature continued to support this demonstration program in the current biennium. With an anticipated increase in federal support for states' home visiting system development, the CCF effort serves as a critical test program for understanding the challenges and benefits of home visiting as a prevention and early intervention strategy for increasing numbers of our most at-risk children and families.

In the 2009-2010 program year, 463 families with 585 children were enrolled in services. Among the children, 80% of children were under the age of four years. These participant numbers demonstrate that funded programs are operating at or close to the capacity CCF has been able to fund. This supports the conclusion that access to and the acceptability of these services is a success in all the local programs.

CCF-funded programs were effective in reaching racially and ethnically diverse families with 53% of enrolled children representing diverse racial and ethnic heritages. CCF programs also serve large percentages of recent immigrant families (20%) and children with identified developmental needs (14%).

Key evaluation findings reflect three areas of results: participant characteristics and their implications for program development, program implementation and development implications, and documentation of program benefits. These findings are both encouraging and highlight the need for significant ongoing program development support.

Participant Characteristics

- Individual programs both within and across home visiting models differ significantly in terms of participant characteristics. Understanding the effects of the participant differences will be a continuing need in measuring program success across communities.
- The programs successful in reaching a diverse population of families also demonstrate the need to address cultural factors in service delivery and the success of programs in supporting culturally capable practice in staff delivering services.
- While need was not systematically assessed across all programs in this year's evaluation, the complexity and vulnerability of families in several programs is a significant finding. This is documented in NFP programs as an example, where domestic violence exposure is higher than national program data suggests is common in other programs. In other home visiting programs, program leaders report they have increased the intensity of supports because of participant service needs in local communities.

Program Characteristics

- All programs are highly effective in identifying and recruiting the families they intend to serve. Programs are operating at or near capacity.
- Adaptations to the evidence based home visiting models are the norm. In nine of 11 programs, providers engage in systematic adaptations to the original model with respect

to new populations, enhanced methods of service delivery, and introduction of new prioritized service goals. The implication is that as Washington State expands home visiting, understanding how these models continue to evolve and the impact and analysis of these modification on cost and benefit will be a significant development task.

- Using a mix of formal fidelity indicators and program performance benchmarks, all 11 programs demonstrated significant but not uniform success in meeting implementation standards. The level of client need, fixed/limited program resources, staff disruption, management of referral systems, and the challenge of managing caseloads to maximize service delivery goals are common barriers across the 11 programs. A common program implementation reporting framework developed in this CCF-led effort proved effective in identifying common success and challenges across program models.
- Parents as Teachers (PAT) programs vary widely in the levels of services delivered. Understanding the 'service dose' variability is a recommended focus for program quality improvement discussions and a high priority issue to track in development of outcome evaluation activities by CCF.
- Nurse Family Partnership (NFP) program fidelity measurement is best documented across models. Fidelity in the six NFP programs is high but shared challenges include engagement of young women early in their pregnancy and improving delivery of intended services during the pregnancy.

Program Benefits

- NFP programs demonstrate success through pregnancy and the baby's first year in improving health outcomes. Specific benefits are documented for reduced premature birth and low birth weight, NICU utilization, and ER visits. While there is some variability across programs, all six programs demonstrate benefits on key measures. Each of the identified outcomes reflects reduction of high cost/high risks for young children and families.
- Neighborhood House's Parent Child Home Program (PCHP) demonstrates significant positive gains in parenting and child behavior using the national model's observational assessment methodology.
- Parents as Teachers and Parenting Partnership programs have tools and or data collection development needs that are too substantial to permit even preliminary description of outcomes for this year.
- Participant satisfaction across all models is consistently high.

This year's evaluation demonstrates that CCF-funded/supported evidence based home visiting programs are established and successful community services are reaching their intended clientele. Consistent with the published home visiting literature, local programs face a variety of staff, client, and resource challenges that are significant impacts on program focus, implementation fidelity, and presumably on program benefits. This evaluation supports the conclusion that all programs are working to deliver their model with rigor and attention to the model's standards but that success in these efforts is fragile. Particularly with respect to Nurse Family Partnership, the return on investment at barely three years into this demonstration program appears to be meaningful and supportive of the value of this commitment to evidence based home visitation.

A. Introduction

In 2007, the Washington State Legislature passed legislation funding home visitation as a promising area of service development in improving child development outcomes. The legislature granted Washington State's child abuse and neglect prevention agency, the Council for Children & Families (CCF), the responsibility to implement and test this prevention strategy. CCF conducted a review of promising and evidence-based program models and established a list of programs with a sufficiently strong research base to qualify for funding. Following a competitive process, CCF then funded a network of community agencies across the state to implement models from this list. The findings from the CCF review are provided in Appendix A. Based on this review and the competitive application process, 11 sites are presently implementing four program models. The achievements of these 11 sites through June 30 2010 are the subject of this evaluation report.

1. Nurse Family Partnership

Nurse Family Partnership's (NFP) program goals are to:

- improve pregnancy outcomes,
- improve child health and development by increasing parenting capacity and capability, and
- improve the economic self-sufficiency of families by support of parents' education and employment achievement.

NFP serves low-income first time mothers and their children. Nurses with caseloads of no more than 25 families provide services using a structured and curriculum-based intervention. A trained nurse supervisor provides supervision for up to eight NFP nurses.

Mothers enroll in NFP services no later than their 28th week. Participants are visited at least 42 times by a nurse over a two-year period with frequency of contact high early in the pregnancy and post-partum periods and then less frequently as the child ages. The NFP program involves standardized protocols for each visit combined with flexible problem-solving to help mothers achieve program goals. Three separate, randomized controlled trials (Coalition for Evidence-based Policy, 2007) demonstrate positive pregnancy, child development, and family self-sufficiency outcomes over varied follow-up periods.

CCF funds six NFP local programs: the Spokane NFP program administered by the Spokane Regional Health District serving Spokane County, Thurston NFP serving Thurston County, Tacoma-Pierce NFP serving Pierce County, two programs delivered by one provider in Yakima County serving two geographically distinct areas (Yakima East Valley NFP, part of Thrive by Five, and Yakima Valley Memorial Hospital NFP), and the White Center NFP program, also part of the Thrive by Five in unincorporated urban King County.

2. Parents as Teachers

Parents as Teachers (PAT) serves families of all income levels from pregnancy through the fifth birthday of the youngest child. PAT program goals are to:

- increase parent knowledge of early childhood development and improve parenting practices,
- provide early detection of developmental delays and health issues,

- prevent child abuse and neglect, and
- increase children's school readiness.

PAT supports flexible structures for program delivery including districts and non-profit entities. Professional staff typically have degrees in education and social services and are supervised by program-trained supervisors on a monthly basis. Caseloads depend on the service model but range from 12-24 families. PAT has support from a number of well-designed quasi-experimental studies and more limited random control trial research base supporting the efficacy of the program in addressing its identified goals (Pfannenstiel, 2002; Zigler et al., 2008). Each of the PAT program use the copyrighted program curricula, Born to Learn ©, which includes three progressive curricula based on the age of the children being served.

Parents as Teachers CCF-funded programs are delivered by the St. James Family Center serving rural Southwestern Washington, Spokane PAT provided through Children's Home Society serving Spokane County, and Yakima PAT, a part of Thrive by Five's program catchment area in Yakima County.

3. Parent Child Home Program

The Parent-Child Home Program (PCHP) provides services to families with children ages two to three years from families with multiple risk factors including low income, cultural and language barriers, and single parents. The goal of PCHP is to improve school readiness by enriching children's world through play, reading, and conversation with their parents.

PCHP employs a non-directive approach by home visitors who model behaviors for parents that enhance children's development in brief twice a week visits for two years. Through play, home visitors encourage active engagement of parents through the use of engaging books and toys. Parents are encouraged to continue quality play and reading between visits with the books and toys they receive each week. Implementation sites are involved in a highly structured implementation protocol and staff and supervisors are trained in a common national strategy to support program replication. PCHP program goals have been supported in multiple quasi-experimental and randomized control studies (Levenstein et al., 1998; Levenstein & Levenstein, 2002). PCHP is delivered by Neighborhood House in a geographic area of Seattle with predominant recent Asian immigrant communities.

4. Parenting Partnership Program

The Parenting Partnership Program at the Mary Bridge Children's Hospital and Health Center in Tacoma is an intensive home visiting program for at-risk parents with medically complex infants. The program utilizing the STEEP (Steps Toward Effective Enjoyable Parenting) curriculum (Erickson & Egeland, 1999). Core components of the original program include home visitor activities to:

- Promote healthy beliefs and expectations about pregnancy, childbirth, child rearing and the parent-child relationship.
- Promote understanding of child development and form realistic expectations of child behavior.
- Encourage a sensitive, predictable response to baby's cues and signals.

- Enhance a parent's ability to see things from a child's point of view.
- Facilitate the creation of a home environment that is safe, predictable, and conducive to optimal development.
- Help parents identify and strengthen support networks for themselves and their child.
- Build and support life management skills and effective use of resources.
- Help parents recognize options, claim power, and make healthy choices.

The Parenting Partnership serves families who have received medical care through the hospital. Home visitors in the Parenting Partnership provide education and support regarding care of children, expectations regarding child development, the parents' identification and response to children's cues, and understanding the unique needs and capabilities of the individual child. The Parenting Partnership program modifies STEEP by recruiting families after the child is born rather than during pregnancy and extending service duration from two years to three years to address the complex needs of many of the identified children.

B. Program Descriptions

1. Participant Demographics.

Table 1: Families Served by Program Model

	Nurse Family (Six programs)	Parents As Teachers (Three Programs)	Parent Child Home Program (1 Program)	Parenting Partnership (1 Program)	EBHV Total
Number of Families	202	160	32	69	463

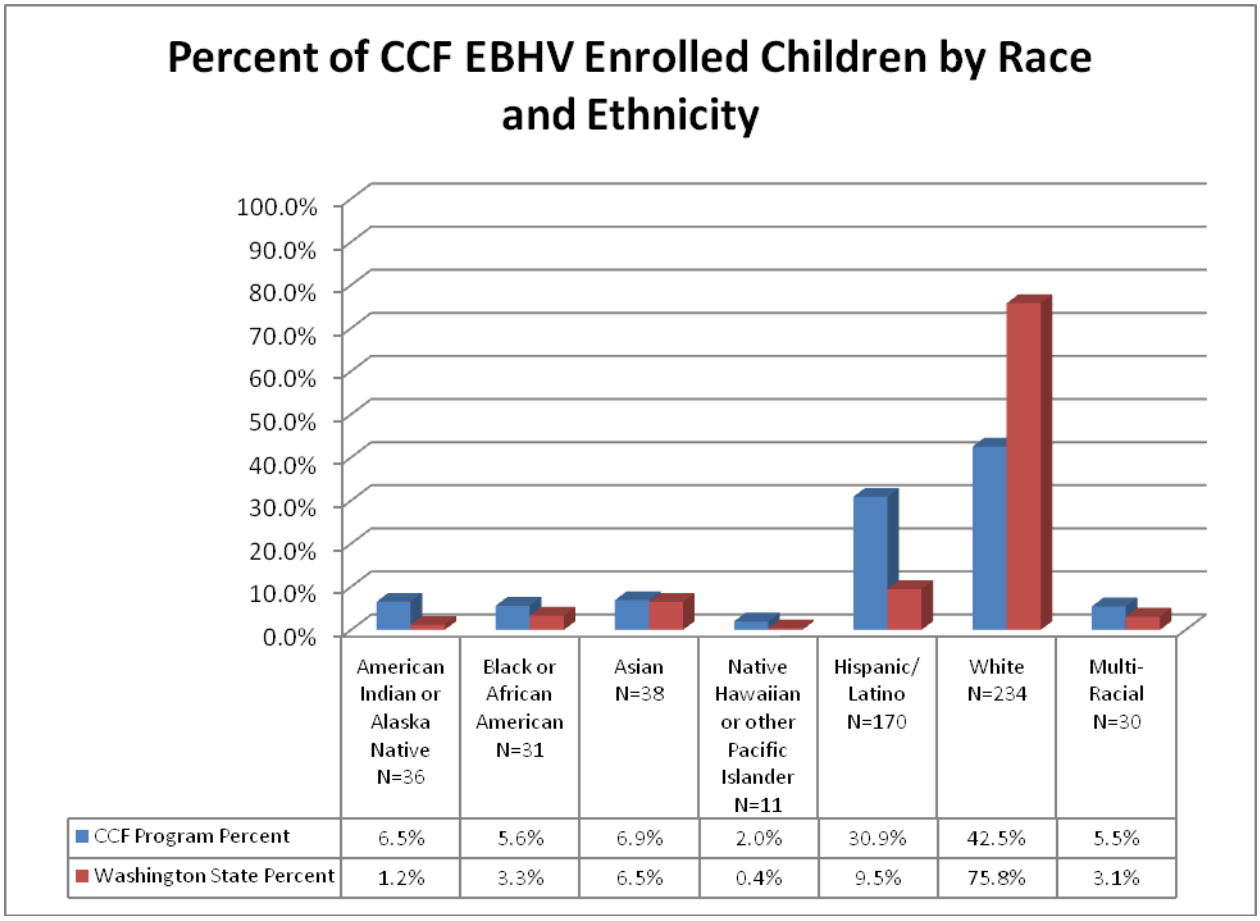
The 11 EBHV programs served a total of 463 families including services to 585 parents and 554 children as identified clients. Programs vary in terms of their program enrollment of both parents if available, inclusion of multiple children as services participants in single families, and as is the case in NFP, the enrollment of mothers prior to the birth of their children. As a result, a larger number of children and adults in the 463 families are potentially influenced by these programs over time.

Table 2: Enrolled Children's Ages

	0-3 Years Old N=445	4-6 Years Old N=81	7-13 Years Old N=20	14-18 Years Old N=5
Percent of Enrolled Children	80%	15%	4%	1%

Eighty percent of children enrolled in CCF's EBHV programs are under the age of four years. Another 15% are siblings ages 4-7 years in PAT and Parenting Partnership programs. Five percent of the identified children are eight years or older and include older siblings in PAT programs. In Nurse Family Partnership sites, 28 clients (14% of NFP enrolled families) were enrolled in the program but had yet to give birth to their children.

Figure 1: Ethnicity and Racial Heritage of Enrolled EBHV Families

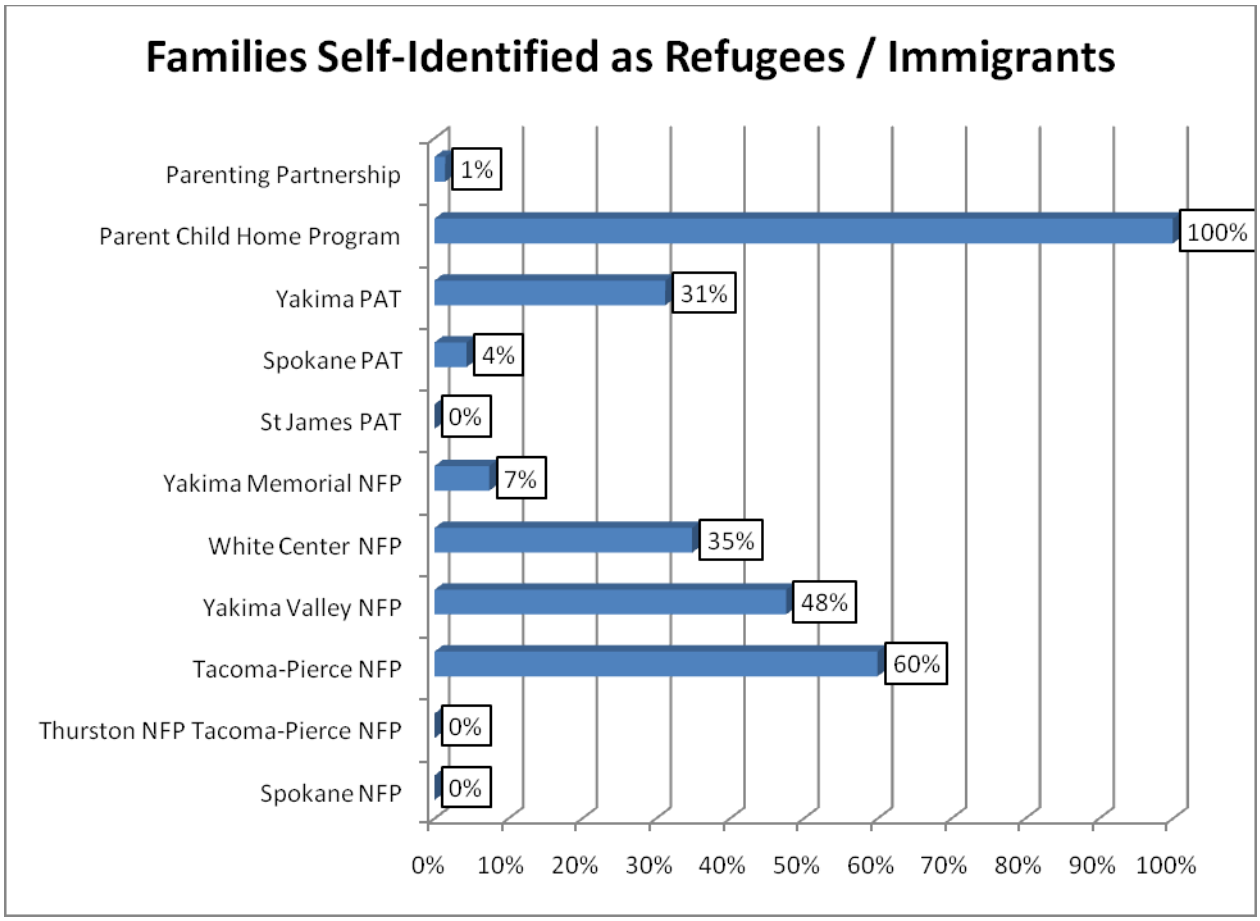


	American Indian or Alaska Native N=36	Black or African American N=31	Asian N=38	Native Hawaiian or other Pacific Islander N=11	Hispanic/ Latino N=170	White N=234	Multi-Racial N=30
CCF Program Percent	6.5%	5.6%	6.9%	2.0%	30.9%	42.5%	5.5%
Washington State Percent	1.2%	3.3%	6.5%	0.4%	9.5%	75.8%	3.1%

Children of diverse ethnic and racial backgrounds comprise 53% of CCF EBHV enrolled children. CCF's programs demonstrated particular success in engaging Hispanic/Latino families. One in four children is from Hispanic/Latino families. In all but two of the 11 programs (Spokane NFP and St. James PAT, each with less than 10% reported diversity), EBHV local programs report 60-100% of enrolled children are of diverse backgrounds.

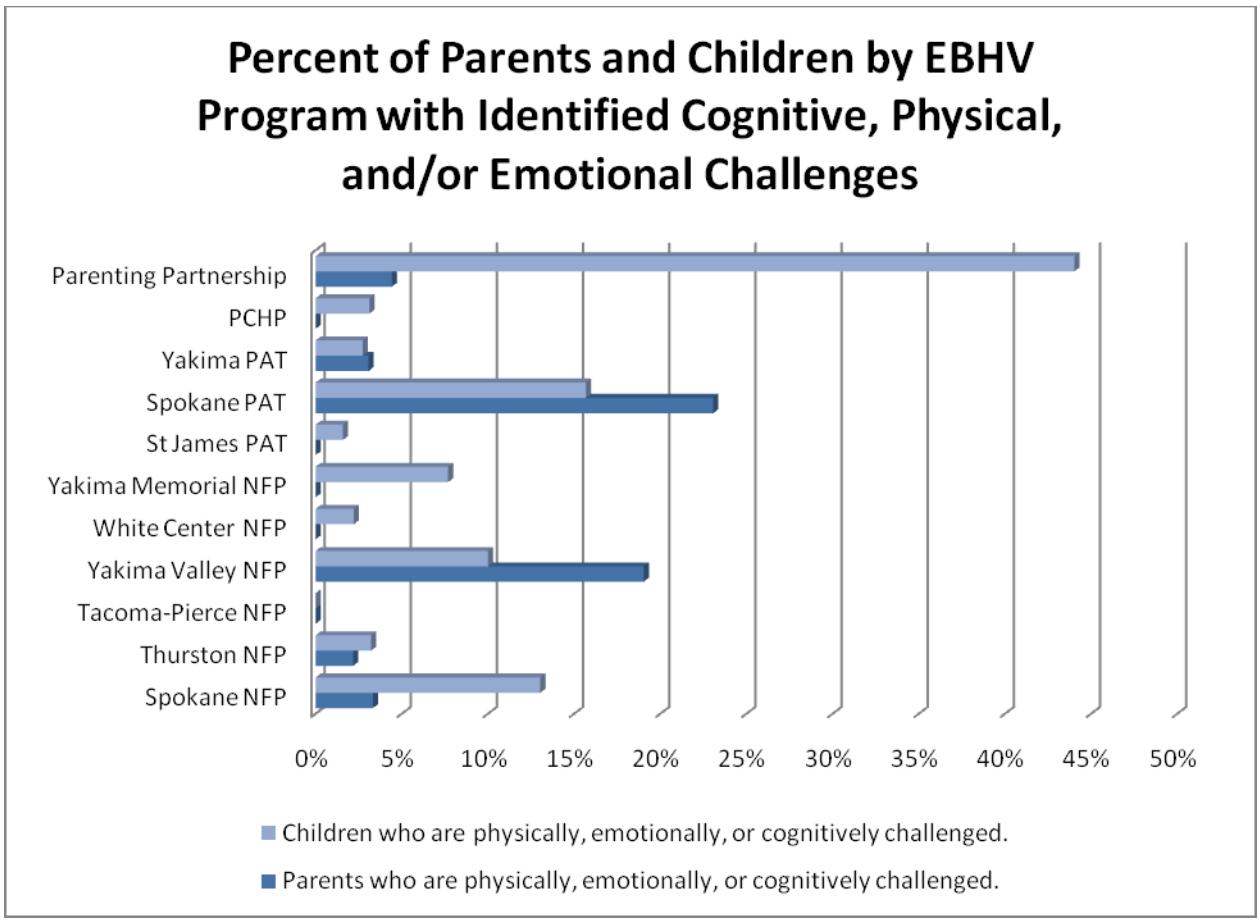
2. Specific Risk Populations.

Figure 2: Percent of Enrolled Families Self-Identified as Refugees/Immigrants



Twenty percent of all families in CCF's EBHV programs self-identified as immigrants or refugees in the United States. CCF's enrollment of immigrant and refugee families compares to 12% of residents who are foreign born in the general population in Washington State. In Neighborhood House's Parent Child Home Program, 100% of enrolled families are recent immigrant families from Asia, and this site specifically adapts the PCHP model to this community. However, EBHV programs in Yakima, White Center, and Tacoma also serve significant percentages of immigrant/refugee families.

Figure 3: Percent of Enrolled Parents and Children with Identified Physical, Cognitive, and/ or Emotional Challenges



Programs reported the number of parents and children with physical, cognitive, and/or emotional challenges that influence need and service delivery. Across the 11 programs, six percent of parents and 14% of these young children were identified with significant challenges. As was the case with other family characteristics, these needs were not distributed equally across the EBHV local programs. The Yakima Valley NFP and Spokane PAT program both report significant levels of parent need with one in five parents in these two programs identified with specific challenges. Mary Bridge's Parenting Partnership program specifically addresses medically vulnerable infants and their siblings and reports 44% of their enrolled children have documented challenges. However, four additional programs (Spokane NFP, Spokane PAT, Yakima Valley NFP, and Yakima Memorial NFP) report one in ten enrolled children have documented challenges (range 8-16% of enrolled children).

CCF's EBHV funds represent just one source of funding supporting local services. All 11 programs use a braided funding strategy to support these local services. Examples of other sources of support include private donations, federal grants, and funding from local government

contracts. Each program was asked to identify the clients and staff specifically supported by CCF in this report. A total of 17 FTE of professionals are supported by the CCF EBHV program.

Across all programs, a total of 51 volunteers provided 408 hours of assistance distributed across seven of the 11 programs. Two of the programs report substantive use of volunteers as program supports.

3. Programs' Model Adaptations.

Nine of the 11 funded programs report some systematic adaptation to the original evidence based home visiting model.

- Spokane NFP is participating in a randomized control trial testing relationship and fathering service enhancements to NFP.
- Thurston NFP is participating in a randomized trial introducing home-based family planning in a funding research study.
- Tacoma-Pierce is not presently involved in adaptations to the model.
- The two Yakima NFP programs are using mental health consultant services to enhance supervision and nurse support functions.
- White Center NFP is offering fathering classes (Conscious Fathering) and involved in the home-based family planning randomized control trial study.
- Yakima PAT has used an expanded definition of 'caregiver' to include all adults in the family who want to participate. The Yakima PAT also delivers the group services of the PAT model using expanded and expanded range of group events to include community social events and related early learning group programs.
- St. James PAT is involved in no adaptations to the model.
- Spokane PAT is focusing on teen parents and specifically providing services in Isabella House a supported living center for women in recovery.
- Neighborhood House PCHP model modifications involve the use of staff drawn from the Chinese and Vietnamese communities served. Cultural, language, and beliefs about child development and parenting all require adaptations in training and supervisory activities to support families and staff.
- The Parenting Partnership program adapts the STEEP program to address medically fragile infants and their families with adaptations including the initial focus on these very young children, relaxing some of the structural program delivery aspects of the original model, flexible frequency and duration of services based on need, and clinical supports based on children's medical needs.

In each instance, national model developers have been notified, agreed to, or are actively part of these adaptations in practice.

In reviewing the home visiting literature, we found no systematic review of the impact and scope of program adaptations but anecdotal reports confirm that adaptations are commonplace as evidence based home visiting is more broadly adopted across communities. It is reasonable to question if evidence based models are indeed being replicated when adaptations to models is typical for most programs. We believe, however, that these adaptations reflect the need for continued refinement of home visiting as a field and the fact that all of the models are actively working to build and refine their services and evidence of effectiveness. In local programs, these

adaptations reflect responses to pressures emerging in the practice, stretching these models to new populations, and in several instances securing additional service delivery dollars that home visiting can be provided in communities. As a result, we propose that adaptations are now part of home visiting delivery and need to be systematically understood as these services mature and expand.

4. Model Fidelity and Program Performance Benchmarks.

The common assumption that fidelity standards are common in evidence based home visiting is a fallacy. This continues to be a major effort for model developers and even in NFP, the fidelity standards continue to evolve. Introducing standards of performance to understand success and challenges is very valuable in encouraging accountability in local programs and creates a framework for understanding the complex challenges associated with supporting these models in routine practice.

The fidelity guidance for NFP dissemination sites like the six programs funded by CCF meet the conventional definition of a set of fidelity measures. As noted below, the other three programs do not meet this standard because of very significant modification (Neighborhood House PCHP, Mary Bridge Parenting Partnership) in the model or the absence of equivalent standards in PAT.

In order to address the variable degree to which fidelity is addressed in home visiting models, CCF and the WSU evaluation team worked with funded local program leadership to identify and agree on five broad standards for describing program implementation across the four EBHV models:

1. Recruitment aligns with the model's intended service population or the local adaptation and recruitment goals are met.
2. Staff training goals are explicit and met.
3. Program caseload structure for the model is maintained as required by the model developers.
4. Minimum standard for the model's service location, focus, and frequency criteria are met.
5. Supervision meets minimum standards.

a. Nurse Family Partnership.

Fidelity criteria for NFP programs are well documented using a common Client Information System across all programs. Fidelity is addressed by tracking 18 elements of service structure, engagement, and service delivery measures. The national model developer identifies these dimensions as critical to creating the conditions that support replicating the results of the original research studies. In consultation with CCF's NFP programs, we report measures on eight of the 18 indicators considered to be definitional to the model, sensitive to change, and aligned with the CCF goals of child maltreatment prevention and school readiness.
NFP fidelity standards include a program national objective and actual national program performance. Many of the national fidelity objectives are not met in average program performance nationally. Participant attrition during pregnancy and completed enrollment by the 16th week of gestation are two noteworthy examples of the struggle to meet these standards nationally. For this report, we compare CCF-funded program progress to national fidelity standards and then note CCF program performance to national program experience.

The following table summarizes the results for the six CCF-funded NFP programs. Where asterisks are present, program performance was less than NFP fidelity standards. Only when the reported percentage is greater than three percentage points below the national fidelity standard is the area reported as ‘needing development’.

Table 3: Summary of NFP Program Fidelity Indicators[1]

CCF Nurse Family Partnership Program Comparisons on Eight Fidelity Dimensions Fidelity Measure	**NFP National Objective**	**National NFP performance**		Spokane NFP	Thurston NFP	Tacoma Pierce NFP	Yakima East Valley NFP	White Center NFP	Yakima Memorial NFP
Clients participate voluntarily in the NFP program. They are not mandated by social services to participate in the program.	100%	100%		100%	100%	100%	100%	100%	100%
Client is a first time mother	100%	100%		100%	100%	100%	100%	100%	100%
Client is enrolled by the 28th week of her pregnancy	100%	99%		99%	96%	100%	99%	93%**	99%
Full time Nurse HV carries caseloads of no more than 25 active clients	Not to exceed 25 active clients/nurse	NA		25	<25	<25	<25	25	<25
A full time Nursing Supervisor provides supervision to no more than eight individual nurse home visitors.	Ratio of supervisor to nurses not to exceed 1:8	NA		1.8	1.4	1:5	1.6	1.8	1.6
Number of home visits completed during pregnancy will increase to 80%	80%	80%		67%**	67%**	73%**	77%	79%	77%
Number of women enrolled by 16 weeks gestation will increase	60%	41%		43%**	33%**	42%**	50%**	49%**	50%**
Decreased attrition during Pregnancy phase	10% or less	16%		15%**	9%	6%	9%	9%	9%

[1] NA- National program performance not available. Reports for the two Yakima NFP programs are duplicates because data is only available at the County level.

Overall, CCF's NFP programs are successful in meeting or exceeding five to seven of the eight national fidelity elements considered.

- All programs are successful in engaging first time voluntary mothers.
- All programs are maintaining supervision ratios aligned at or below national fidelity standards. Some short term variation above this standard is noted in program reports but annual averages meet the standard. There is substantial variability in actual supervisor/nurse ratios across programs.
- All but one program are meeting the standard that 100% of clients are enrolled by the 28th week of their pregnancy.
- All but one program are meeting the fidelity standard of low participant attrition during pregnancy. The one program is performing somewhat better than the national NFP program average.
- Three of the six programs are meaningfully below the goal of completing 80% of planned home visiting during pregnancy. The remaining three programs are also below this standard but by 1-3 percentage points.
- None of the six programs currently meet the standard that 60% of young women are enrolled in services by their 16th week of pregnancy. However, five of the six programs exceed national average program performance.

Additionally, two of the six programs report challenges meeting the planned schedule of reflective supervisory meetings. Reflective supervision for home visiting nurses is considered a critical quality control step in delivery of NFP content with fidelity and meeting the service delivery goals of the model. In both instances, programs report that disruptions in nurses' and supervisors' availability (maternity leave, medical leave, reassignment of supervisors to other public health agency priorities such as H1N1 response) impacted on supervisory goals.

Where fidelity is less than ideal, the principal challenges reflect three themes:

- management of referral relationships,
- the challenges of engaging an at-risk population, and
- the challenges of retaining vulnerable at-risk young women in care.

It is easy to overlook that recruitment goals in part reflect the programs' success in managing complex referral networks as well as juggling caseloads in mature programs to accommodate enrollment of new clients. Several program indicators in the NFP local programs indicate that with respect to substance abuse risk, family violence, and mental health needs young women enrolled in these services may be a higher risk population than are reflected in the original research populations or needs reported in other programs across the United States.

With respect to the NFP programs, we conclude that CCF's NFP programs are performing effectively on multiple fidelity indicators. Delivery of an evidence-based program with fidelity is a continuing process, not an event. Where there are areas of concern common themes across programs suggest areas of shared program improvement. High client need, engagement with a vulnerable population, and management of complex referral and caseload coordination tasks appear to be areas of common challenge.

b. Parents as Teachers.

The Parents as Teachers model does not have performance monitoring and data tracking structures that result in a formal fidelity structure. Rather, self-assessments support formal certification of the program by the model developer. This in part reflects the variety of settings, population focuses, staff variability, and integration of PAT into diverse service structures. Through the use of formal program planning, logic models, national required training, and consultation supports, PAT is a national model with a common set of minimum standards but significant range with respect to how these conditions are operationalized in local programs.

In CCF-funded PAT programs, common broad performance measures were defined to assess program performance within the national guidelines of PAT. These benchmarks serve in place of formal fidelity measures. These included delivery of home visits as principal service method, delivery of frequency of home visits consistent with local plans, delivery of group services, and completion of developmental screenings. Individual performance goals in the three PAT CCF sites varied to reflect local program characteristics.

Table 4: Parents as Teachers Quality Performance Indicators

Program Performance Indicator	St. James PAT	Spokane PAT	Yakima PAT
Home Visit Service Delivery	Met	Met	Met
Home Visit Dose			
-Weekly	Exceeded	Exceeded	Met
-Bi-weekly	Met	Exceeded	Met
-Monthly	Modified to increase frequency of family visits	Modified to increase frequency of family visits	Met
Group Services	Did not Meet	Did not Meet	Met
Developmental Screening (Development, Social Emotional Adjustment, Vision/Hearing, Child Safety)	100%	90%	100%
Service Referrals/ Manage Referral System to PAT	Met	Met	NA

NA - Not reported

The three PAT programs met or exceeded enrollment goals for the year.

Program reports indicated significant success in meeting planned program performance benchmarks. St. James PAT reports that client need resulted in adjusting planned services to provide more intensive services in weekly and bi-weekly sessions compared to monthly sessions. Completion of development screenings was 100% for enrolled families except in Spokane where record keeping and concern about duplicated screens resulted in a 90% screening rate. Group sessions were problematic in two of the three programs because of participant schedules and distance to group service locations. Yakima PAT also reports some less than optimal engagement with fathers in their group services.

With respect to CCF's PAT programs, the three programs report significant success in meeting the implementation standards identified for the model. PAT programs also report challenges resulting from the complexity of family needs. Higher than anticipated family needs resulted in two of the three programs increasing frequency with which they provided services. Higher than anticipated needs also made it difficult for two of the programs to deliver group education programs at the levels intended in the PAT model.

c. Neighborhood House Parent Child Home Program.

Performance measures reflect a mix of PCHP national performance expectations and program practice adaptations reflecting this specific local modification. The national PCHP model developer provides continue support and consultation in setting these program goals. In place of formal fidelity measures, a program performance benchmark strategy was employed. In partnership with CCF and WSU, Neighborhood House identified the following benchmarks:

- Meeting annual enrollment goals (a minimum of 30 families, identified child age two years of age)
- Delivery of a minimum targeted numbers of home visits (23 home visits per family per year)
- Supervisory practices (e.g., two observations of each home visitor/year)
- Paraprofessional training goals include specific types of training and numbers of training hours for each staff.

Program child eligibility, delivery of scheduled home visits, supervision, and observational supervisor co-visitation all occurred according to plan. Unexpected mandatory training demands for a new supervisor resulted in insufficient resources to complete the home visitor training plan; the program completed 20 hours of a planned 32 hours of training in a child and family development training sequence.

The experience in the Neighborhood House PCHP program indicates significant success in meeting implementation benchmarks. The disruption in training reflects the experience in the CCF NFP programs that home visiting model implementation is vulnerable to staff disruptions and the lack of reserve resources to adapt to disruptions.

d. Mary Bridge Parenting Partnership.

Similar to Neighborhood House's PCHP, Parenting Partnership is a supported adaptation of a national EBHV model (STEEP) with significant modifications to address the population served. STEEP model developers continue to provide consultation and support in this adaptation. In place of formal fidelity measures, a program performance benchmark strategy was employed.

In consultation with CCF, Parenting Partnership set program performance benchmarks including:

- Staff annual training goals (3 days of STEEP training for each new hire home visitor. Ongoing continuing education).
- Minimum home visitation goals (program goal was 65 families receiving 1,950 visits in the program year)
- Minimum numbers of group support session offerings (22 sessions per year)

- Minimum thresholds for telephone support contacts (approximately one hour per week phone support contacts for each family)
- Minimum reflective supervision sessions of staff (three hours per month for each social worker).

Parenting Partnership was successful in meeting training and supervisory benchmarks. The number of enrolled families exceeded expectations (69 compared to 65 families). However, new families dropped out of the program at higher than expected rates resulting in a completed home visit rate 81% of the goal of 1,950 visits annually. Phone supports were also reduced because of higher than expected new participant attrition. The ability of the program to adapt to these changing enrollment patterns was compounded by maternity leave for a staff member, which reduced program capacity.

Overall, the Parenting Partnership program was successful in reaching the benchmarks it set for the year. Two factors limited performance. First, this year's new families were more likely to leave the program prematurely. Second, disruptions in staffing resulted in lower program capacity and as result reduced number of service hours.

e. Summary of Fidelity and Benchmark Success across Programs.

Overall, the introduction of a common fidelity/implementation benchmark framework appears to have worked well in defining a set of CCF performance goals. Programs did well against these standards indicating significant effectiveness in delivery of the services CCF intended to support. This performance standards framework also proved effective in identifying common themes that challenge implementation across the four evidence based home visiting models. The complexity of client needs as well as the razor thin resource and staffing margins for programs point to two principal development needs in Washington State's future plans to scale up home visiting as a key part of the continuum of services to vulnerable children and families.

5. Services Delivered.

No service program will achieve perfect service delivery success with its clients. However, demonstrating significant and meaningful service 'dose' is a critical condition for achieving service benefits. The evidence across the 11 CCF EBHV programs indicates that meaningful average service doses were provided in all programs but that programs varied significantly in terms of their success. As noted previously, staff resources and client needs are identified by programs as principal challenges to successful service engagement.

a. Nurse Family Partnership Programs.

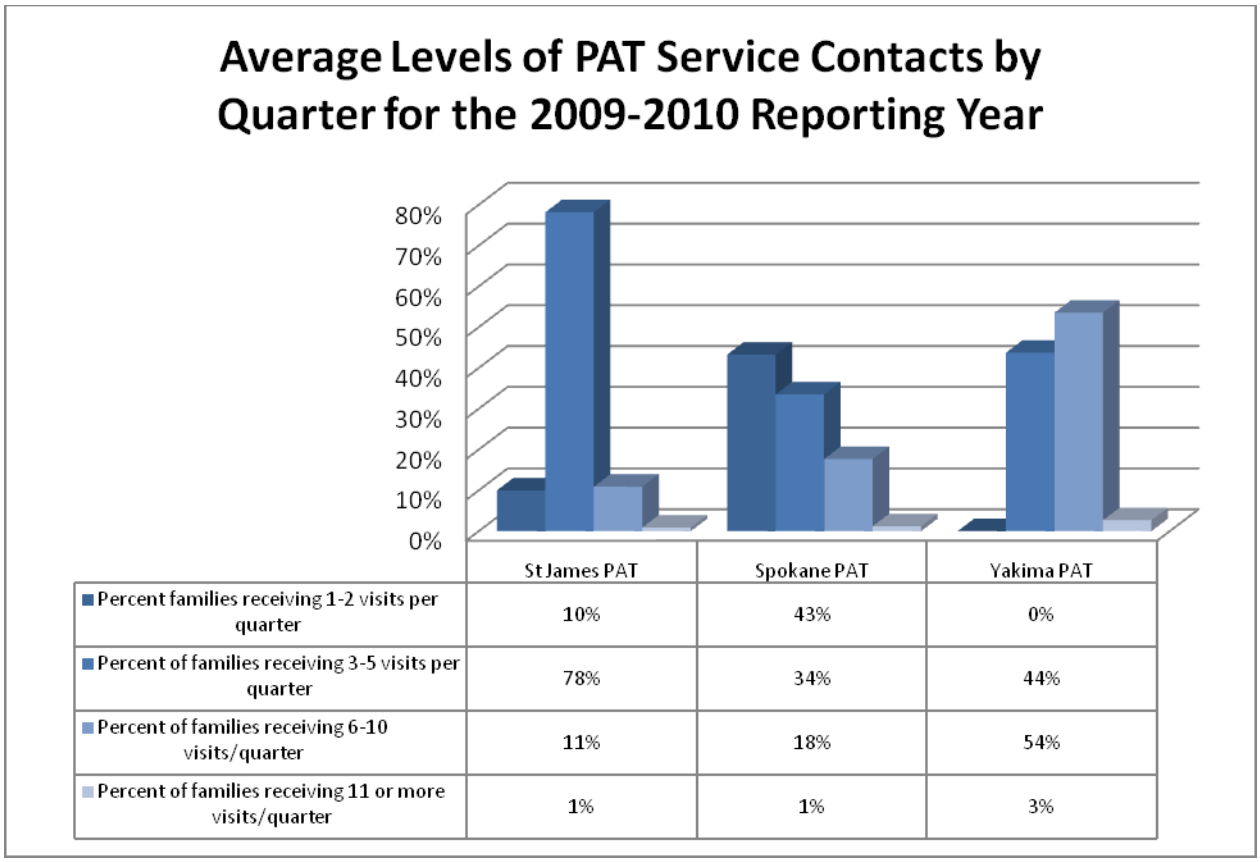
For NFP, the selected service delivery measure identified for CCF programs was the number of completed contacts during the young women's pregnancy. While services continue through the child's second birthday, service participation in pregnancy provides a common measure for the majority of families. Engagement in pregnancy also is considered to be critical for a number of NFP's birth outcomes.

+CCF's NFP programs report quite consistent levels of success in the percent of completed planned visits during pregnancy with a range of 67-79% completion. As noted earlier, three programs are below fidelity standards of 80% but three programs effectively are attaining this fidelity benchmark.

b. Parents as Partners Programs.

Because PAT implementation baselines did include monthly, bi-weekly, and weekly service delivery reports, it is possible to examine average frequency of services across the three PAT programs. The following chart demonstrates that there is significant variability in PAT programs' intensity of service delivery. This is permissible within the model where level of service is in part reflective of the identified need in the families. The variability across programs is identified to underscore the need to support measurement of service 'dose' to family need and the assessment of program outcomes. St. James and Yakima PAT programs report contacts consistent with most of their clients receiving the minimum recommended of 10-12 annual contacts per family. Spokane PAT reports lower levels of contact but has expanded service numbers to respond to referral increases.

Figure 4: Service Delivery Patterns in CCF-Funded PAT Programs[2]



	St James PAT	Spokane PAT	Yakima PAT
Percent families receiving 1-2 visits per quarter	10%	43%	0%
Percent of families receiving 3-5 visits per quarter	78%	34%	44%
Percent of families receiving 6-10 visits/quarter	11%	18%	54%
Percent of families receiving 11 or more visits/quarter	1%	1%	3%

c. Neighborhood House PCHP

Neighborhood House PCHP reports meeting its average performance target of 23 home visits in the first year of service.

d. Parenting Partnership.

The Parenting Partnership program reports meeting approximately 80% of its home visiting and phone contact goals.

6. Turnover in the Enrolled Population

CCF is supporting stable programs with relatively low levels of participant turnover. Actual program enrollment was 22% greater than anticipated, reflecting 463 enrolled families compared to a target of 381 families. This increase in participants includes programs actually increasing their services to respond to demand, families graduating as planned from services, and families

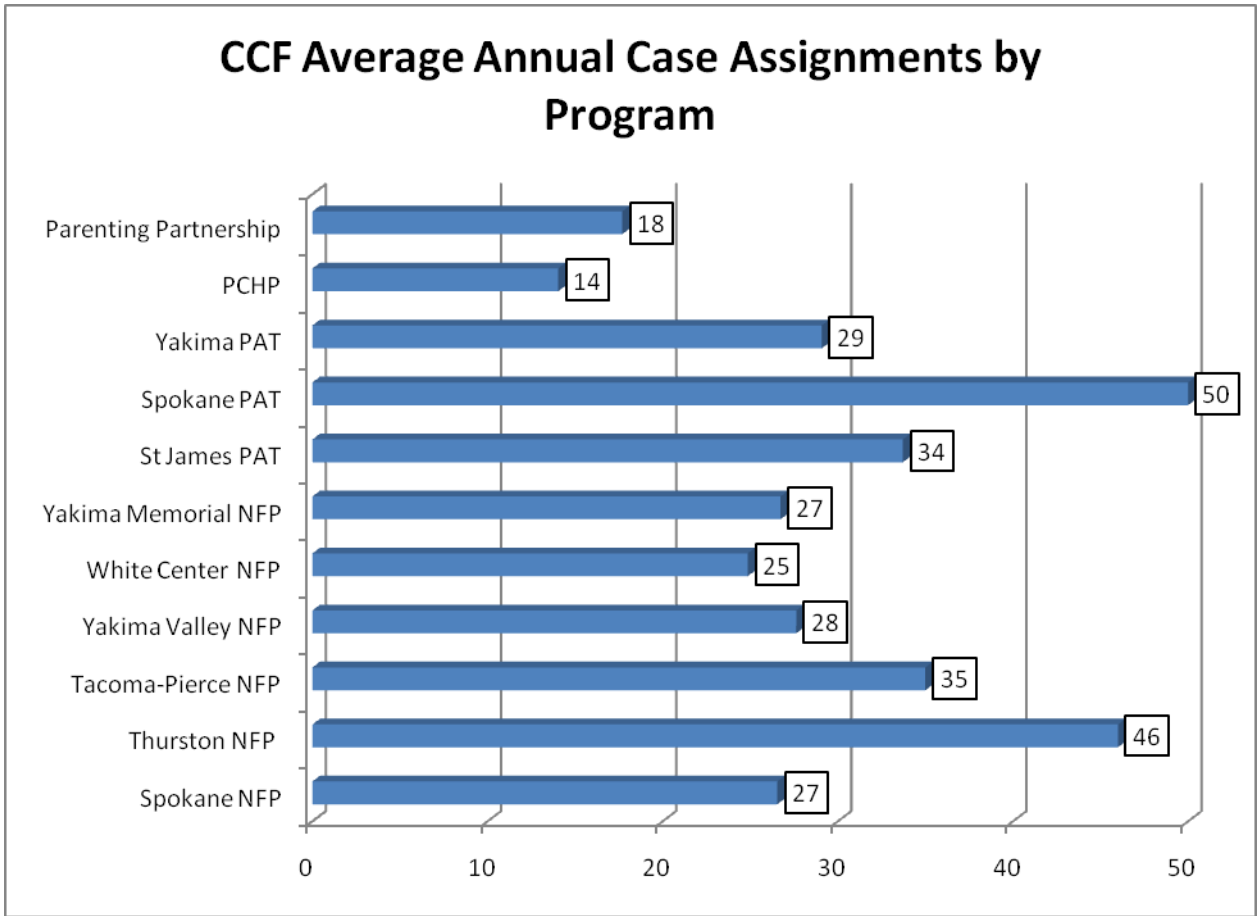
[2] PAT programs report the total unduplicated count of families for the year and the number of families receiving services quarterly in each of the four service categories listed in Figure 4. Service percents for the year were calculated by taking the average number of families in each service category for the year and dividing by the total unduplicated count of families served for the year.

who dropped out and should be considered as program service failures. For example, in the Tacoma-Pierce NFP program, attrition was low (9%) and one quarter of enrolled families graduated from the NFP services according to plan.

All of the programs, except Neighborhood House PCHP which has two year cohorts of participants, support continuous recruitment based on program capacity. As a result, describing program participation is a complex issue requiring further development. That said, when change in participants from all causes including successful service completion is 22% for the year, this indicates that CCF is supporting programs with turnover rates that compare well to other social services. For example, mental health outpatient care service attrition rates range from 20-32% of service populations (Olfson et al., 2009).

To document the range of families served across programs, the unduplicated counts of enrolled families were divided by the annual paid FTE for each program to calculate an average full time equivalent staff caseload for the 2009-2010 reporting year.

Figure 5: Annual Average Cases Assigned for CCF-Funded EBHV Staff Across Models



We did not collect detailed program participation patterns (including number of new families, families continuing services, programs completing services, and families who dropped out of services) systematically except in NFP programs where it is a fidelity measure. Individual

programs enrollment over anticipated service counts varied widely across programs. Eight programs had less than 20% increased enrollment over plan while three programs had 40% or greater increased enrollment over plan. These higher rates of enrollment over plan suggest that these programs may be susceptible to high turnover rates in participants. We recommend CCF include the detailed program participation counts and completion status (successful program completion, dropped out) as a standard annual reporting category in future years.

C. Indicators of Family Benefit across Programs

1. Model-Defined Benefit Indicators

In this portion of the report, we address benefit using existing program assessment strategies in the four programs. These program assessment techniques reflect the current state of practice in the four models. Quality and depth of information varies across local programs and act as a limiting factor on looking at all four models' effect in a consistent manner. Nurse Family Partnership incorporates a series of pregnancy and early life health indicators and well-established benchmarks for program return on investment. Parents as Teachers does not have a standard assessment strategy in its national model but Washington State PAT programs use a common parent self-report of parenting knowledge and self-efficacy. PCHP uses a progress observational report developed by the national Parent Child Home Program. The Parenting Partnership program reports progress using two well-validated measures, the Nursing Child Assessment Satellite Training (NCAST) assessment and the Parenting Stress Index (PSI).

The intent in this past year of the evaluation was to establish data sharing agreements to permit de-identified data collection at the individual family and child level across the CCF-funded programs. While progress was made toward this goal, data sharing agreements and the associated human subjects protection approvals were deferred. We deferred this development because the Washington State budget crisis through 2009-2010 made it raised doubts that the CCF home visiting program would continue. However, in spite of this setback, we were still able to accomplish the following:

- Reach agreement on the use of the Ages and Stages Questionnaire 3rd Edition and Ages and Stages Questionnaire Social Emotional surveys as the principal baseline and repeated measure assessment tools for use across all four model programs funded by CCF.
- Develop and begin the use of a common computer-based data collection tool for PAT programs to standardized the reporting of program and outcome information
- Develop an equivalent computer-based data collection and reporting tool for Parenting Programs.
- Begin detailed discussions with NFP and PCHP national model developers for the transfer of participant data using the standard data collection protocols created by the national models.

In consultation with CCF staff, we determined that introducing major development steps to support evaluation was not defensible if the effort was going to be defunded as we began to implement a new data sharing plan. The CCF home visiting program did survive and we are now implementing the planned evaluation development effort. The consequence for this report is we are limited to reporting summary data for each program. In the next year's report, we will report

on data describing program impact using both individual family and child characteristics to describe program outcomes.

a. Nurse Family Partnership

Based on a review of CCF program goals of reducing child maltreatment risk and improving school readiness, five health status and childcare outcomes were identified based on performance measures embedded in the NFP model. These measures include: premature birth (<37 gestational weeks), low birth weight, the percent of infants who spent time in the neonatal intensive care unit (NICU), the percent of mothers who initiated and sustained breastfeeding, the percent of children with emergency room visits between birth and six months of age and from birth to 12 months of age. Additionally, we examined hospitalization and language acquisition in toddlers but both measures proved to be on too few children to be useful measures. Both measures may prove useful in the future with increased numbers of children in these programs over time.

The following tables summarize results for the six NFP programs compared with either NFP program objectives, NFP national average, and with respect to breastfeeding the Health People 2010 national public health goal. NFP program objectives reflect the original research findings and known public health best practice. Individual program performance and cumulative CCF performance against these standards is indicated using symbols indicating the CCF program result was greater than (>), less than (<), or equal to (=) the national standards.

Table 5: CCF-funded NFP Program Percents of Premature Birth

Premature Birth Percents	Local Program	NFP Objectives	National NFP Programs	Local Comparison Compared to NFP Objective	Local Comparison to NFP National Program Performance
Spokane NFP	8.3%	7.6%	9.7%	>	<
Thurston NFP	6.4%	7.6%	9.7%	<	<
Tacoma Pierce NFP	7.9%	7.6%	9.7%	>	<
Yakima East Valley NFP	9.9%	7.6%	9.7%	>	>
White Center NFP	5.0%	7.6%	9.7%	<	<
Yakima Memorial NFP	9.9%	7.6%	9.7%	>	>
CCF Average	7.9%	7.6%	9.7%	>	<

These program outcomes are based on statistics available for the entire local community's NFP program results. This is necessary because the NFP data system presently will not allow for examining sub-sets of children within a local program. As a result, the statistics are based on experience with several hundred children and parents across the six communities. We believe

there is no reason to expect that these overall program results are different for the arbitrary sub-set of children assigned to CCF funding.

Table 6: CCF-funded NFP Program Percents of Low Birth Weight Infants

Low Birth Weight	Local Program	NFP Objectives	National NFP Programs	Local Comparison Compared to NFP Objective	Local Comparison to NFP National Program Performance
Spokane NFP	6.9%	5.0%	9.3%	>	<
Thurston NFP	7.3%	5.0%	9.3%	>	<
Tacoma Pierce NFP	3.5%	5.0%	9.3%	<	<
Yakima East Valley NFP	7.0%	5.0%	9.3%	>	<
White Center NFP	6.3%	5.0%	9.3%	>	<
Yakima Memorial NFP	7.0%	5.0%	9.3%	>	<
CCF Average	6.3%	5.0%	9.3%	>	<

With respect to reducing the percentage of premature births, overall CCF-funded EBHV program performance was better than national NFP program performance (7.9% v. 9.7%) and only slightly above the national NFP program objective (7.9% v. 7.6%). Four of the six CCF-funded programs reported lower premature births than the national average. Two of the six programs had premature birth weights indicating better birth outcomes than the NFP national standard.

In examining low birth weight infants as a related but separate indicator of healthy birth outcomes, all six local programs had better birth weight outcomes than the national NFP program performance but only one in six programs had outcomes better than the national NFP objective. As a result, CCF-funded program results were superior to national NFP program objectives (6.3% v. 9.3% low birth weight infants) but did not meet the NFP national objective (6.3% v. 5.0% low birth weight infants).

Table 7: CCF-funded NFP Program Percents of Children Requiring NICU Stays

Percent Infants Who Spent Time in the NICU				Median number of days spent in NICU			
Program	**Local Program**	**NFP Objectives**	**Local Comparison Compared to NFP Objective**	**Program**	**Local Program**	**NFP Objectives**	**Local Comparison Compared to NFP Objective**
Spokane NFP	15%	14%	>	Spokane NFP	7	6	>
Thurston NFP	16%	14%	<	Thurston NFP	6	6	=
Tacoma Pierce NFP	14%	14%	=	Tacoma Pierce NFP	3	6	<
Yakima East Valley NFP	13%	14%	<	Yakima East Valley NFP	2	6	<
White Center NFP	12%	14%	<	White Center NFP	4	6	<
Yakima Memorial NFP	13%	14%	<	Yakima Memorial NFP	2	6	<
CCF Average	14%	14%	=	CCF Average	4	6	<

In reviewing the percent of infants requiring neonatal intensive care unit (NICU) stays, CCF-funded programs met the national NFP objective and report a meaningfully lower number of the average number of days in the NICU (4 v. 6 days). Five of the six local programs met or improved on the NFP objective. Five of the six programs met or improved on the average number of NICU days NFP objective. The one program not meeting the standard on percent of infants requiring NICU stays and median NICU days missed the standard by one percentage point and t the average number of NICU days goal by one day.

Table 8: CCF-funded NFP Program Percents Initiated and Sustained Breastfeeding

Local Program	Initiated Breastfeeding	6 months Breast-feeding	12 months Breast-feeding	Relationship Initiated NFP Objective	Relationship 6 Months NFP Standards	Relationship 12 Months NFP Standards
Spokane NFP	95%	18%	12%	>	<	<
Thurston NFP	98%	32%	20%	>	>	>
Tacoma Pierce NFP	92%	30%	22%	>	>	>
Yakima East Valley NFP	92%	34%	22%	>	>	>
White Center NFP	95%	33%	33%	>	>	>
Yakima Memorial NFP	92%	34%	22%	>	>	>
CCF Average	94%	30%	22%	>	>	>
National NFP	77%	27%	16%			
Healthy People 2010 Target	75%	50%	25%			

Compared to NFP program objectives, CCF-funded NFP programs had higher rates of initiated breastfeeding at birth and maintained higher rates of breastfeeding through the year following the birth of the child. CCF's programs average greater than the 2010 Healthy People goal for breastfeeding initiation but was less than Healthy People 2010 goals at six and 12 months. All six programs exceed the NFP objective and Healthy People 2010 goal at birth. At six months and 12 months, five of the six programs exceeded the NFP program objective for breastfeeding percentages but none reached the Healthy People 2010 goal at six months and only one exceeded the Health People 2010 goal at 12 months.

Table 9: CCF-funded NFP Program Percents of Emergency Room Visits

	0-6 Months ER Visits	0-12 Months ER Visits	0-6 Local v. NFP Objective	0-12 Local v. NFP Objective
Spokane NFP	9.1%	11.4%	>	>
Thurston NFP	5.1%	12.0%	>	>
Tacoma Pierce NFP	1.0%	6.9%	<	<
Yakima East Valley NFP	1.8%	10.8%	<	>
White Center NFP	2.4%	4.9%	<	<
Yakima Memorial NFP	1.8%	10.8%	<	>
CCF Average	3.5%	9.5%	<	>
Washington State NFP Program Average	4.8%	10.9%	<	>
National NFP Program Percents	4.6%	9.4%		

In comparison to the national NFP program averages, CCF programs' average emergency room care was lower in the first six months (3.5% v. 4.6%) and equivalent to the national program averages at 12 months (9.5% v. 9.4%). Four of six local programs had improved ER visit results at six months and two of six local programs had improved results at 12 months.

In the NFP protocol, domestic violence risk is assessed at several times in the course of care. We present data for risk at the start of the program (prior to 28th gestational week) and approximately two months later at the end of the pregnancy (36th gestational week). Although a short time period, domestic violence risk reduction during pregnancy is a critical indicator because of the increased risk of domestic violence during pregnancy and the physical vulnerability of the mother and child. It is likely that the reported risk is an undercount because these very sensitive questions that often evoke women's concern regarding CPS referral are initially asked early in the nurse-mother relationship.

Compared to national NFP program experience, CCF-funded programs have somewhat higher rates of domestic violence occurrence and risk on average. Risk is particularly high in the Spokane Regional Health District NFP program and reflects other indicators that the Spokane sample may include more at-risk families than are present in some other programs. Overall, one in 10 mothers report recent domestic violence and fear of their male partners. The next table summarizes risk over the year prior to entering NFP services.

Table 10: CCF-funded NFP Program Maternal Report of Domestic Violence in Past Year

	Percent Abused in past year	NFP National Average	Local Program v. NFP Average	Percent Currently Afraid of Partner/Other	NFP National Average	Local Program v. NFP Average
Spokane NFP	19%	14%	>	17%	6%	>
Thurston NFP	23%	14%	>	16%	6%	>
Tacoma Pierce NFP	16%	14%	>	5%	6%	<
Yakima East Valley NFP	8%	14%	<	3%	6%	<
White Center NFP	16%	14%	>	7%	6%	>
Yakima Memorial NFP	8%	14%	<	3%	6%	<
CCF Average	15%	14.0%	>	8%	6.0%	>

Following NFP national program practice, change in risk is reported as a percent change at 36 weeks pregnant compared to percent risk at intake. As an indicator, this measure documents short term risk change and cannot be used as an indicator of domestic violence risk change over time. However, reduction of domestic violence risk during pregnancy is a significant infant and maternal health outcome. CCF average performance demonstrates greater reduction in domestic violence physical abuse but not in women's fear of their partners. Two of the six programs report reductions in risk during the pregnancy.

Table 11: CCF-funded NFP Program Pregnancy Domestic Violence Risk and Change

Local Program	Nature of Risk Reported	Percent Women at Intake CCF Programs	Percent Women NFP National Programs At Intake	Percent Women at 36 Weeks of Pregnancy in CCF Programs	Percent Change in CCF program Intake to 36 Weeks of Pregnancy	National NFP Program Change Intake to 36 Weeks of Pregnancy	Comparison to NFP National Program Average
Spokane NFP	Physical Abuse during Pregnancy	14%	7%	4%	-72%	-42%	>
	Current Fear of Partner	19%	7%	13%	-32%	-49%	<
Thurston NFP	Physical Abuse during Pregnancy	7%	7%	1%	-80%	-42%	>
	Current Fear of Partner	9%	7%	2%	-80%	-49%	>
Tacoma Pierce NFP	Physical Abuse during Pregnancy	10%	7%	7%	-33%	-42%	<
	Current Fear of Partner	7%	7%	5%	-25%	-49%	<
Yakima East Valley NFP	Physical Abuse during Pregnancy	8%	7%	5%	-38%	-42%	<
	Current Fear of Partner	6%	7%	5%	-20%	-49%	<
White Center NFP	Physical Abuse during Pregnancy	11%	7%	5%	-56%	-42%	>
	Current Fear of Partner	5%	7%	4%	-23%	-49%	<
Yakima Memorial NFP	Physical Abuse during Pregnancy	8%	7%	5%	-38%	-42%	<
	Current Fear of Partner	6%	7%	5%	-20%	-49%	<
CCF Average	Physical Abuse Total N=1,389	10%	7%	5%	-53%	-42%	>
	Fear of partner Total N=1,397	9%	7%	6%	-33%	-49%	<

a. Summary of NFP Service Outcomes

In summary, CCF's funded NFP programs demonstrate significant short term outcomes for participating mothers and children. Gains for CCF served families include:

- reduced percentages of premature birth in comparison to national NFP program performance,

- reduced percent of low birth weight children, lower NICU utilization and reduced NICU average stays compared to the national NFP objective,
- higher rates of initiated breastfeeding, and reduced ER utilization through six months and comparable performance to national standards through 12 months.

Persistence in breastfeeding and reduction in domestic violence risk in pregnancy are two areas where program performance improvement should be addressed. **The balance of evidence supports significant short term benefits to mothers and infants as a result of the NFP services supported by CCF.**

b. Parents as Teachers

PAT programs employ a parent self-report tool, the Parenting Ladder, as a program planning tool and a measure of program outcome. Because the Parenting Ladder is established in practice, we attempted to build on this existing practice knowing there were a number of concerns with this instrument and its use. The Parenting Ladder has acceptable reliability but no known validity data and no established scale structure. The Parenting Ladder also uses a retrospective report of baseline which is a potentially beneficial program planning tool with families but not an accepted method of reporting change in program evaluation. Further, existing practice has two of the programs reporting using one tool with item response ranging from 0-6 and the third program reporting item responses ranging from 1-5. As a result, in addition to the constraints on the overall tool, one of the three PAT programs is not using a comparable reporting tool. In addition, one of the three programs completed information on only six participants. Regrettably, we conclude it is not possible to assess change over time in an acceptable manner for PAT in this report because of these multiple concerns.

Table 12: Summary of Parenting Ladder Domains of Parent Self-Report

		Knowledge of Child Development		Parenting Enrichment		Parent Self-Efficacy	
	N	Baseline	6 Months	Baseline	6 Months	Baseline	6 Months
St James PAT (7 point scale)	34	4.1	5.2	4.3	6.6	4.3	5.3
Yakima PAT (5 point scale)	34	2.4	4.2	2.8	4.4	2.9	4.4

The table above is a summary of reports for the two programs where substantial numbers of participants voluntarily completed the Parenting Ladder. Each of the three dimensions include 2-4 questions combined following discussion with the PAT program leaders as domains related to CCF program goals. Results indicate change in expected direction but it is not possible to assess the significance of the change given the limitations with the tool.

c. Parent Child Home Program

Neighborhood House's PCHP adapted program uses two assessment tools that are the standard tools for measuring change in parents and children over time. The observational assessment tools have acceptable reliability and validity. The use of the tools is a significant focus of PCHP model training. The available data for this year baseline to outcome at the end of the year describes the

experience of a cohort of families completing the first year of a two year intervention cycle. Program benefit assesses increased frequency of positive parenting and an increase in the quality of parent-child interactions (Outcome 1) as well as the occurrences of positive child behaviors (Outcome 2). The Parent and Child Together (PACT) observational scale is a standardized tool home visitors use to describe the quality of parent-child interactions in PCHP home visits. The Child Behavior Traits (CBT) observational scale is also a standardized tool home visitors use to describe child behaviors with an emphasis on prosocial and positive self-regulatory behaviors.

At the end of the first year of intervention, participants in Neighborhood House's PCHP are reported by staff to have increased on both positive parenting and positive child behaviors compared to baseline observations. The following table summarizes baseline and end of Year 1 scores. Change on both measures is statistically significant (t-test, $p<.01$ for both measures).

Table 13: Change Scores on PCHP Scales for Parent and Child Progress

Outcome 1: Increase the observed quality of parent-child interactions				Outcome 2: Increase the observed occurrence of positive child behaviors			
Parenting Observation Scales	Avg. Score	N (# of kids)	Std. Deviation	Child Observation Scales	Avg. Score	N (# of kids)	Std. Deviation
PACT Pre-Test	2.50	32	0.55	CBT Pre-Test	1.98	32	0.47
PACT Post-Test	3.12	32	0.45	CBT Post-Test	2.76	32	0.48

In an uncontrolled pre-post assessment, these findings support the conclusion that parent and child behaviors and interactions are being beneficially affected by the PCHP program.

d. Parenting Partnership

The Parenting Partnership program has introduced two strong assessment tools, NCAST and PSI, but has yet to implement a data management system to establish baselines and track progress over time. As a result, change information and baseline descriptive data was not available from the program. The WSU evaluation team developed such a management information system for Parenting Partners in early 2010 but the program is only entering into use in Fall 2010.

e. Client Satisfaction across the CCF Funded Programs

Program satisfaction was reported to two common questions. Some missing information is noted in the following two tables (indicated by NA). Across all programs, participants report high levels of satisfaction and rate the value of the services received as very valuable.

Table 14: CCF-Funded Program Client Satisfaction

On a scale from 1 (not at all satisfied) to 5 (very satisfied), how satisfied were you with the program?		
	Mean Response	N
Spokane NFP	4.78	42
Thurston NFP	5.0	24
Tacoma Pierce NFP	4.7	40
Yakima East Valley NFP	5.0	NA
White Center NFP	4.8	NA
Yakima Memorial NFP	5	NA
St James PAT	4.9	NA
Spokane PAT	NA	NA
Yakima PAT	5	NA
PCHP	4.8	28
Parenting Partnership	4.9	50

Table 15: CCF-Funded Program Client Report of Program Value

On a scale from 1 (least valuable) to 5 (most valuable), how would you rate this program?		
	Mean Response	N
Spokane NFP	NA	NA
Thurston NFP	4.9	13
Tacoma Pierce NFP	4.8	40
Yakima East Valley NFP	5.0	NA
White Center NFP	4.8	NA
Yakima Memorial NFP	5.0	NA
St James PAT	4.9	NA
Spokane PAT	5.0	21
Yakima PAT	5.0	NA
PCHP	5.0	28
Parenting Partnership	NA	NA

D. Discussion / Policy Implications

The investment made by the Washington State Legislature in extraordinary times demands that we address the progress made in demonstrating the investment was wise and continued investment is justified. In this discussion, we identify a set of conditions that create a measure of progress achieved and the nature of work still to be done.

There are three expectations states reasonably have in scaling up the delivery of evidence-based practice home visiting as part of the routine continuum of care. The first expectation is that the programs can be successfully launched and maintained by staff in a range of agencies. The second expectation is that well-managed programs delivered with fidelity can reproduce the result documented in well-designed research programs. The third expectation is that it is feasible to produce evidence of home visiting programs' benefits in these routine service delivery agencies. We find that (1) CCF is supporting a viable and robust home visiting demonstration system with good potential for expansion, (2) implementation of the 'standard' models for home visiting is challenged by reality on the ground, and (3) there is great need to invest in the infrastructure that can demonstrate outcomes in routine service settings like the agencies funded by CCF.

Demonstrating the Viability and Acceptability of Home Visiting

CCF's programs first have to demonstrate that they are successful programs addressing needs in their communities. After two and half years of service delivery, the home visiting programs supported through CCF are mature services, highly utilized in their home communities, and engaged with families with significant and diverse needs. In several of the funded programs, CCF funding was critical to establishing new services while other programs expanded services because of CCF's added resources. After less than three years of operation, all the programs are operating at capacity or close to capacity, and there is the demand to expand these programs if resources were available. As a result, the first condition for establishing a return on investment for the Washington State Legislature's investment has been achieved- these programs are feasible, can scale up in a range of communities, and will be supported by communities.

Program Integrity and Model Fidelity Challenges

The fidelity of program delivery defines the second condition to be realized if the investment in evidence-based home visiting is to be achieved. Fidelity implies an extensive set of standards and clear mechanisms for assessing if these standards are being met. In reality, fidelity in home visiting is very much a work in progress. Nurse Family Partnership is a home visiting model with an intensive development history and the NFP program's standards meet the full definition fidelity guidelines. The remaining three models supported by CCF involve varying levels of progress toward systematic fidelity measurement but all fall short of the standardization fidelity assessment implies. Progress in measuring fidelity is further complicated because of two practices defining CCF's work. First, in almost all the programs there are significant adaptations to the original model as practitioners respond to the range of community needs. Second, there are no established guidelines for how to describe fidelity when comparing progress across a range of

models as CCF does in its home visiting portfolio. As a result, addressing fidelity in evidence-based home visiting has to be considered a process and not a completed body of work.

To address home visiting fidelity as a work in progress, we introduced a common framework across models to assess (1) program implementation quality and (2) practice adherence to models' goals. In order to create a common approach across the four CCF models, we developed a reporting structure emphasizing (1) recruitment standards; (2) staff training goals; (3) adherence to caseload expectations; (4) success in meeting minimum requirements for location of services, the frequency of contact, and the services purpose; and (6) minimum expectations regarding supervision. In general, this framework was successful in describing moderate to high levels of success in implementing the programs and adhering to specific model's expectations. However, no program met all standards.

Implementation of home visiting programs with integrity is a fragile process requiring significant effort. Programs are successful in meeting the spirit of implementation with fidelity but struggle with often ambiguous standards and inevitably less than perfection in meeting all standards. This is hard work and prior success is not a guarantee of continuing success. As a result, as CCF and other state partners consider the expansion of home visitation, addressing how to support implementation with high model adherence will need to be a continuing focus of significant effort. The CCF-funded model programs have crossed the threshold to being credible programs meeting minimum standards consistent with the broad concept of fidelity. As a result, the second condition of establishing a return on investment for the state's commitment to home visiting appears to have been achieved.

Addressing the Dilemma of Effective Implementation Policy

Maintaining high implementation standards in home visiting is vulnerable to staff, training, organizational, and client challenges. Several of the programs reviewed in this report encountered significant demands because of staff challenges. These programs often operate as standalone efforts or are demonstration programs in larger social service organizations. Our state experiment with home visiting means home visiting operates without a cushion of program reserves to call upon when disruptions occur in the program. The result is when disruptions in plans occur, home visiting staff stretch, adapt, or services suffer because there are not reserves to meet the challenge. Several examples of this emerged in the CCF program with respect to staff medical or maternity leave as one pathway to disruption. As the state invests in demonstration programs or relies on services delivered by smaller nonprofits, organizational capacity and commitment has to be addressed if we are truly to test the value of home visiting. Many of the problems with implementation and resource assignment are beyond the skills of the line level practitioners and can only be solved by the organizational and state commitments necessary for home visiting to fully meet its promise.

Fixsen and colleagues (2005) provide a research-based set of guidelines identified as 'implementation science' to address the process of organizational change in evidence-based practices. The commitment to supporting high quality implementation is the third condition for achieving success in home visiting but involves actions beyond the demonstration programs described in this evaluation.

Critical to implementation sciences is a systems perspective. The quality of service provided by individual staff depends on the quality of organizational implementation in adopting, adapting, and managing services. As home visiting becomes part of the continuum of care, the quality of supports and resources available will depend significantly on how state efforts are organized to support this quality. This evaluation of CCF's funded programs provides multiple examples that many challenges are beyond what line staff and supervisors in programs can address alone.

Using implementation science principles, public policy leaders like CCF and other state agencies can exercise critical leadership and development supports in four areas:

- Performance enhancement, including accountability, support and evaluation development
- System development and maintenance, including building common efforts and coordination
- Anticipation and response to changing social conditions, and integration of the continuing integration of new research in home visiting and
- Advocacy and education in public policy to build support and resources for home visiting.

These efforts reflect a commitment to continuous quality improvement (McLaughlin & Kaluzny, 2006). At the agency level, development responsibilities include:

- Leadership actions to create value for home visiting in the host organization
- Leaders managing the home visiting models as developing strategies needing effective service improvement and organizational improvement plans.
- Intentional staff development, staff support, training, and supervision
- Investment in clinical information systems and development of information-driven clinical decision-making.

Duggan et al. (2004) identified the two essential development pathways for effective implementation: (1) the commitment of the organization to adopting evidence-based practice and (2) the agency's capacity for supervision, development, information use, and investment in improvement (Duggan et al, 2004; Fixsen et al., 2005). However, even with leadership commitment to improving service implementation, agencies have to develop specific skills to address elements of an improvement plan including creation of internal processes to support development regarding staff practice, information use, and effective development planning to address service and organizational improvement.

Building on the promising foundation created for home visiting in the CCF programs, a dialogue at the state level needs to include:

- Aligning accountability standards with necessary support functions through consultation and development based on emerging need
- Coordination with model developers and recognition of emerging research findings to guide practice
- Public policy education to build will and investment
- Anticipation of external opportunities and risks because of changing societal influences
- Education of other state leaders that evidence based home visiting is a developing field and not a one-size-fits-all solution.

Adaptation and Replication Challenges as Central Elements of Home Visiting

It is clear in this evaluation that home visiting adaptations are the norm not the exception. Nine of the 11 programs funded by CCF now support significant program adaptations. Home visiting models are not static programs but continue to grow and adapt based on new research and demands in the field. As home visiting models move into broad dissemination, these pressures to adapt are likely to accelerate and continue evolution in the models. This is true for all models (e.g., O'Brien, 2005). Specifying what the evolutionary changes are and how they affect practice are critical steps in defining local agency success and how states determine how and what to support with investment.

Research repeatedly demonstrates that child and family differences influence program success in home visiting (Ammerman et al, 2006). Addressing these participant differences is a major source of variability in program effectiveness across interventions (Ammerman et al, 2006; Duggan et al., 2004) and critical to address in understanding system development needs.
As home visiting expands, the ability to replicate evidence-based benefits is challenged by local variations in family characteristics and need. Home visiting models adapt to population differences as well as new research findings. In the present evaluation, we demonstrated that participants vary widely across communities within the same model, and participant needs are a principal reason local programs begin to adapt home visiting models. National model developers recognize this varied set of demands and continue to refine and adapt the original evidence-based strategies based on this field experience. An example of this is the recent release by NFP of new fathering and relationship education materials.

Staff influences, including the professional preparation and personal capacity of staff, are a second factor influencing the success of home visitation (e.g., Duggan et al, 2004). Staff selection, staff match to intervention practice, and staff development in essential skills are critical to implementing a home visiting program with success. The positive news is that these staff factors are where agency's have the ability to influence the quality of care (Family Strengthening Policy Center, 2007; Home Visiting Forum, 2004). State leadership can have a significant impact on agencies by setting selection standards and helping with resources for agencies to engage this work effectively.

The Essential Role of High Quality, High Relevance Program Information

Program monitoring and improvement rely significantly on the development and use of information systems to guide service quality improvement. Unfortunately, information system development and use in service improvement practice is consistently one of the least developed aspects of service delivery (Carillo, 2008; Fitch, 2005) including in most home visiting practices Thompson et al. (2001) note that the effective development and use of clinically relevant information systems is the scaffold on which service improvement depends, but its use is critically dependent on supportive leadership, involvement of stakeholders, clarity in defining the outcomes, timely and sensitive data collection, staff consent, and management of conflicting time demands for team members. The skills to articulate and implement development plans are also a necessary part of organization practice.

Addressing continuous quality improvement by creating high value clinical information was an unachieved goal in this year's evaluation. While progress was made in piloting data systems and reaching consensus on improved assessment tools, we suspended implementation of these efforts when in Winter 2010 there appeared a high probability that the CCF home visiting effort would be defunded because of the state's financial crisis. We concluded that we could not justify beginning this inevitably disruptive development process with providers if the program was not going to continue. We are now moving forward with this work and expect to have an operational individual family and child outcomes assessment system in place by the beginning of 2011 with outcome results available in 2012.

The Early Evidence of Meaningful Benefit

Finally, the last condition required to justify investment in home visiting is compelling evidence of outcomes that change the well-being of children and their families. To a large degree, this remains work to be done. However, there are meaningful early results in the present evaluation to the outcome/benefit question. Most significantly, Nurse Family Partnership programs demonstrate real increases in wellbeing and reduction in risk during pregnancy and the children's first year of life. NFP programs in the CCF portfolio have reduced low birth weight occurrence, decreased premature births, and lowered utilization of high cost medical care in infancy. These results support the promise that home visiting can reduce major social costs that can justify public investment in home visiting.

Summary

In summary, we conclude that in two and half years, CCF funded home visiting programs have created the foundation for demonstrating the promise of home visiting by establishing vibrant services that receive significant community support, by demonstrating rigorous service implementation, and by documenting several of the key program and policy steps needed to increase the impact of these services. Partial program outcomes document important reductions in risk for some of Washington's most vulnerable children.

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We look forward to continuing our collaboration with the Area Health Education Center of Washington State University and these programs as this evaluation of Washington State's nationally-recognized approach to the implementation of evidence based home visiting programs moves forward.

These evidence based home visiting programs and this evaluation would not have been possible without the leadership provided by the CCF Council. Their commitment as citizen, state agency and legislative leaders to making sure publicly-funded services are cost-effective, of the highest possible quality and produce meaningful results for at risk children and families is inspirational.

For more information about the Council for Children & Families, see www.ccf.wa.gov.

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